

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-24 (Cancelled):

Claim 25 (Currently Amended) A process for producing a compound comprising:

(A) introducing a substrate and a reaction medium into a reactor at a pressure higher than atmospheric pressure and at a temperature at least equal to the boiling point at atmospheric pressure of the reaction medium for a time and under conditions suitable to form said compound in the form of a slurry containing the compound and the reaction medium;

(B) separating at least some of the reaction medium from said slurry at a pressure higher than atmospheric pressure and at a temperature at least equal to the boiling point at atmospheric pressure of the reaction medium to obtain a cake having a weight ratio of a cake-attached liquid of not more than 50% based on the solids content; and

(C) drying the resulting cake by moving it into a compound recovery zone under conditions in which the internal energy released by the movement of the compound into the compound recovery zone evaporates the cake-attached liquid, said conditions comprising moving the compound into a compound recovery zone having a pressure lower than the pressure in (B);

wherein in the drying step (C), a weight ratio of the cake-attached liquid is not more than 10 % based on the solids content.

Claim 26 (Previously Presented) The process according to claim 25, wherein in the drying step (C), the resulting cake is moved into a compound recovery zone having a pressure lower than the pressure in (B) and a temperature lower than the temperature in (B).

Claim 27 (Previously Presented): The process of producing a compound according to claim 25, wherein in the separation step (B), the cake is washed with a washing liquid having an evaporation latent heat at the boiling point at atmospheric pressure of not more than 300 kcal/kg in a state in which the pressure is kept at higher than atmospheric pressure, and the temperature is kept at the boiling point at atmospheric pressure of the reaction medium or higher.

Claim 28 (Previously presented): The process of producing a compound according to claim 25, wherein the reaction medium has an evaporation latent heat at the boiling point at atmospheric pressure of not more than 300 kcal/kg.

Claim 29 (Previously Presented): The process of producing a compound according to claim 25, wherein in the separation step (B), the cake is washed with a washing liquid having a temperature in the range of the boiling point at atmospheric pressure of the washing liquid or higher but not higher than $(TB1 + 100\text{ }^{\circ}\text{C})$ (wherein TB1 stands for the temperature ($^{\circ}\text{C}$) of an unwashed cake).

Claim 30 (Previously Presented): The process of producing a compound according to claim 25, wherein in the separation step (B), the cake is washed with a washing liquid in an amount of from 0.03 to 5.0 times based on the weight of the solids content in the cake.

Claim 31 (Previously Presented): The process of producing a compound according to claim 25, wherein the compound to be formed in the reaction step (A) is an aromatic carboxylic acid.

Claim 32 (Previously Presented): The process of producing a compound according to claim 31, wherein the aromatic carboxylic acid is terephthalic acid.

Claim 33 (Previously Presented): The process of producing a compound according to claim 31, wherein in the reaction step (A), an alkyl group-substituted aromatic compound is subjected to liquid phase oxidation with molecular oxygen to obtain the aromatic carboxylic acid.

Claim 34 (Previously Presented): The process of producing a compound according to claim 32, wherein in (A), p-xylene is subjected to liquid phase oxidation with molecular oxygen to obtain terephthalic acid.

Claim 35 (Previously Presented): The process of producing a compound according to claim 25, wherein (A) is carried out at a temperature in the range of from 50°C to 350°C.

Claim 36 (Previously Presented): The process of producing a compound according to claim 25, wherein (A) is carried out under a pressure in the range of exceeding atmospheric pressure but not higher than 20 MPa.

Claim 37 (Previously Presented): The process of producing a compound according to claim 25, wherein in the drying step (C), a difference between the temperature of the cake in (B) and the temperature of the cake discharged into the compound recovery zone is from 5°C to 250°C.

Claim 38 (Previously Presented): The process of producing a compound according to claim 25, wherein in the drying step (C), a difference between the pressure in (B) and the pressure in the compound recovery zone is from 0.01 MPa to 22 MPa.

Claim 39 (Previously Presented): The process of producing a compound according to claim 25, wherein in the drying step (C), the compound to be discharged has a median diameter of from 40 μm to 300 μm .

Claim 40 (Previously Presented): The process of producing a compound according to claim 25, wherein in the drying step (C), a weight ratio of the cake-attached liquid is not more than 10 % based on the solids content.

Claim 41 (Previously Presented): The process of producing a compound according to claim 25, wherein in the drying step (C), a weight ratio of the cake-attached liquid is reduced by 3 % or more based on the solids content.

Claim 42 (Previously Presented): The process of producing a compound according to claim 25, wherein in the drying step (C), an intermediate chamber is provided between a separation device used for (B) and the compound recovery zone.

Claim 43 (Previously Presented): The process of producing a compound according to claim 42, wherein in the drying step (C), a dry gas is introduced into the intermediate chamber and/or the compound recovery zone.

Claim 44 (Previously Presented): The process of producing a compound according to claim 25, wherein in the drying step (C), the pressure in the compound recovery zone is atmospheric pressure.

Claim 45 (Previously Presented): The process of producing a compound according to claim 25, wherein a pressure drying device provided with a discharge valve is used for drying step (C).

Claim 46 (Previously Presented): The process of producing a compound according to claim 45, wherein a contact portion between a valve body and a valve seat of the discharge valve is linear and its shape is circular.

Claim 47 (Previously Presented): The process of producing a compound according to claim 45, wherein in the drying step (C), the discharge valve is intermittently opened, and an opening time is from 0.01 seconds to 1 second.

Claim 48 (Previously Presented): The process of producing a compound according to claim 25, wherein an intermediate processing step (D) for carrying out crystallization or dissolution of the compound is provided between the reaction step (A) and the separation step (B).

Claim 49 (Previously Presented): The process of producing a compound according to claim 25, wherein in the reaction step (A), the formed compound is obtained as a solid.